

REMARKS

The Examiner rejected claims 17-23 under 35 U.S.C. §103(a) as allegedly being unpatentable over Liaw (US 6,214,656 B1).

Applicants respectfully traverse the §103 rejections and double patenting rejections with the following arguments.

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35 U.S.C. §103

Claims 17-23 are rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Liaw (US 6,214,656 B1).

The Examiner alleges that " Liaw discloses forming p and n diffusion regions (Fig. 1 shows the p and n wells and col. 2, lines 60-65 discloses that they are formed). A polysilicon layer 16 is formed and part is n doped above the p well and part is p doped above the n well (col. 2, lines 64-67 and col. 3, lines 1.8 and Fig. 1 and Fig. 2). Silicide is selectively formed over the junction (Fig. 10 and col. 3, lines 56-67). The hardmask 36 prevents silicide formation over regions where it is not desired(col. 3, lines 50-54), The silicide is prevented from being formed on the n and p diffusion regions as shown in Fig. 14. It can be seen that the silicide forms an electrical connection between the n and the p diffusion regions. The steps are part of a process for completing formation of devices, which would include further back end of the line processes, as is implied by the disclosure that CMOS devices are formed in the disclosed process(col. 1, lines 7.10 and Col. 4, lines 4754). Liaw discloses that the formation of the silicide selectively and the prevention of the formation of the silicide on other areas reduces current leakage in the disclosure that autodoping is prevented (col. 4, lines 48-60). Although Liaw is silent with respect to GIDL, it would have been obvious to one of ordinary skill in the art that GIDL would also be prevented, as Liaw discloses that the source/drain may also not be silicided(col. 4, lines 55-60). Liaw is silent with respect to the well regions being p+ and n+, although Liaw does teach n and p wells. It would have been obvious to one of ordinary skill in the art at the time of the invention to have formed the diffusion regions as recited because one of ordinary skill in the art would have been able to choose the doping according, to the desired characteristics of the of the device".

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As to claim 17 as amended, Applicants respectfully contend that claim 17 is not unpatentable over Liaw, because Liaw does not teach or suggest each and every feature of claim 17. For example, Liaw does not teach or suggest the feature of "selectively forming a silicide strap over a **portion** of a top surface of the N+ region and the P+ region and extending across the junction area, wherein the silicide strap forms an electrical connection between the P+ region of the polysilicon line and the N+ region of the polysilicon line, and wherein the **portion** of the top surface of the N+ region and the P+ region does **not** comprise an **entire** top surface of the N+ region and the P+ region"(emphasis added). Liaw does not teach forming a silicide strap extending across an N+/P+ junction area and only covering a **portion** of a top surface that does not comprise an **entire** top surface of a P+ region and an N+ region as taught by Applicant's claim 17. In contrast, Liaw teaches in Fig. 10, an **entire** top surface of an N+ region and a P+ region covered by a metal silicide material 62. Therefore, Applicants contend that Liaw does not teach the aforementioned features of claim 17. Based on the preceding arguments, Applicants respectfully maintain that claim 17 is not unpatentable over Liaw, and that claim 17 is in condition for allowance. Since claims 18-23 depend from claim 17, Applicants contend that claims 18-23 are likewise in condition for allowance.

CONCLUSION

Based on the preceding arguments, Applicants respectfully believe that all pending claims and the entire application meet the acceptance criteria for allowance and therefore request favorable action. If the Examiner believes that anything further would be helpful to place the application in better condition for allowance, Applicants invites the Examiner to contact Applicants' representative at the telephone number listed below. The Director is hereby authorized to charge and/or credit Deposit Account No. 09-0456.

Date: 09/30/2004

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